



6AU5-GT

BEAM POWER TUBE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:
- Voltage . . . . 6.3 . . . . ac or dc volts
- Current . . . . 1.25 . . . . amp

Direct Interelectrode Capacitances (Approx.):°

Grid No.1 to plate	0.5	μμf
Grid No.1 to cathode & grid No.3, grid No.2, and heater	11.3	μμf
Plate to cathode & grid No.3, grid No.2, and heater	7	μμf
Transconductance#	5600	μmhos
Mu-Factor, Grid No.2 to Grid No.1■	5.9	

Mechanical:

Mounting Position	Any
Maximum Overall Length	3-5/16"
Maximum Seated Length	2-3/4"
Maximum Diameter	1-9/32"
Bulb	T-9
Base	Intermediate-Shell Octal 6-Pin (JETEC No.B6-8) or Short Intermediate-Shell Octal 6-Pin (JETEC No.B6-60)
Basing Designation for BOTTOM VIEW	6CK

- Pin 1 - Grid No.1
- Pin 2 - Heater
- Pin 3 - Cathode, Grid No.3
- Pin 5 - Plate
- Pin 7 - Heater
- Pin 8 - Grid No.2

HORIZONTAL DEFLECTION AMPLIFIER

For operation in a 525-line, 30-frame system□

Maximum Ratings, *Design-Center Values:*

DC PLATE VOLTAGE	550 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE* (Absolute maximum)	5500●max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE*	-1250 max.	volts
DC GRID-No.2 (SCREEN) VOLTAGE†	200 max.	volts

° With no external shield.

For plate volts = 115, grid-No.2 volts = 175, grid-No.1 volts = -20.

■ For plate volts = 100, grid-No.2 volts = 100, grid-No.1 volts = -4.5.

□ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.

* The duration of the voltage pulse must not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

● Under no circumstances should this absolute value be exceeded.

† Preferably obtained through a series dropping resistor of sufficient magnitude to limit the grid-No.2 input to the rated maximum value.

→ Indicates a change.

TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY





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PEAK NEGATIVE-PULSE GRID-No.1 (CONTROL-GRID) VOLTAGE	-300 max.	volts
CATHODE CURRENT:		
Peak	400 max.	ma
Average	110 max.	ma
GRID-No.2 INPUT	2.5 max.	watts
PLATE DISSIPATION◇	10 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200♦ max.	volts
BULB TEMPERATURE (At hottest point)▲	210 max.	°C

Maximum Circuit Values:

→ Grid-No.1-Circuit Resistance	0.47 max.	megohm

→ **VOLTAGE REGULATOR SERVICE**

Triode Connection--Grid No.2 Connected to Plate

Maximum Ratings, *Design-Center Values:*

PLATE VOLTAGE	300 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Negative bias value	125 max.	volts
Positive bias value	0 max.	volts
CATHODE CURRENT	110 max.	ma
PLATE & GRID-No.2 DISSIPATION (Total)	10 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200♦ max.	volts

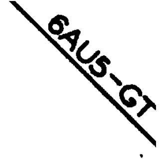
◇ An adequate cathode-bias resistor or other suitable means is required to protect the tube in the absence of excitation.

♦ The dc component must not exceed 100 volts.

▲ For tube in vertical position with base down in free space and with natural ventilation, the hottest point on the bulb is in the center of the dome just above open end of cathode sleeve.

→ Indicates a change.





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AVERAGE PLATE CHARACTERISTICS

E_f = 6.3 VOLTS
GRID-Nº1 VOLTS = 0

GRID-Nº2 VOLTS = 100

175

150

125

75

50

PLATE VOLTS

0 100 200 300 400 500

PLATE MILLIAMPERES

400 300 200 100 0

SEPT. 8, 1949

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-7355

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AVERAGE PLATE CHARACTERISTICS

E_f = 6.3 VOLTS
GRID-№2 VOLTS = 150

Curve labels: GRID-№1 VOLTS (E_{c1}) = 0, +5, −5, −10, −15, −25; I_b; I_{c2}

PLATE VOLTS: 0, 100, 200, 300, 400, 500, 600

PLATE (I_b) OR GRID-№2 (I_{c2}) MILLIAMPERES: 400, 300, 200, 100, 0